

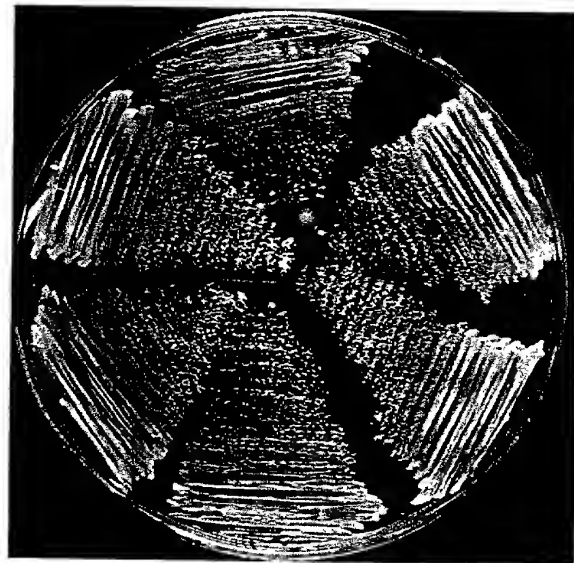
hKv1.1LOOP	QILGQTLKASMRELGL
hKv1.2LOOP	QILGQTLKASMRELGL
hKv1.3LOOP	QILGQTLKASMRELGL
hKv1.5LOOP	QILGKTLOASMRELGL
hKv1.6LOOP	QILGKTLOASMRELGL
hKv1.4LOOP	QILGHTLRASMRELGL
hKv3.4LOOP	RVLGHTLRASINEFL

FIG. 1

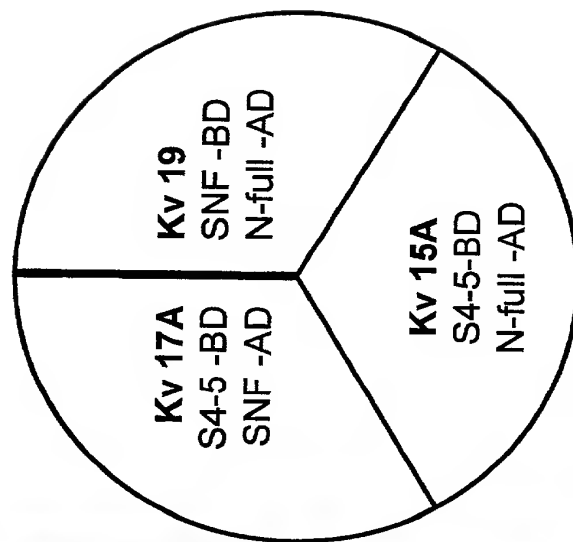
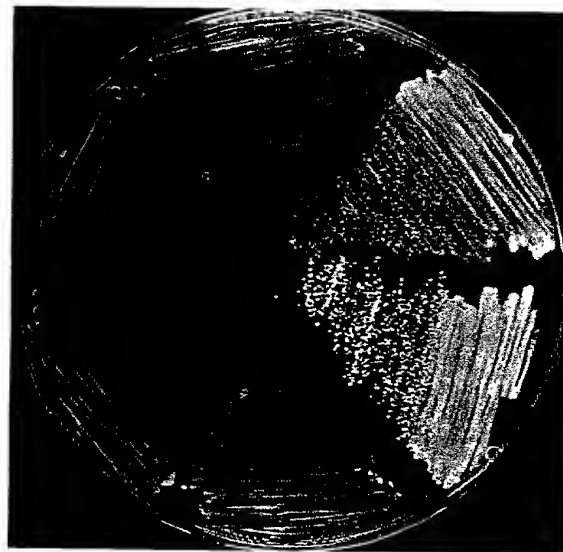
hKvβ1N	-MQVSIACTEHNLKSRNGEDRLLSKQSSTAP-
hKvβ1bN	MHLYKPACADIP-SPKLGLPKSSESALKCRW-
hKvβ3N	MHLYKPACADIP-SPKLGLPKSSESALKCRW-
hKv3.4N	-MISSVCVSSYRGRKSGNKPPSKITCLKEEMA
hKvβ1CN	-MLAARTGAAGSQISEENTKLRRQSGFSVAG-
hKv1.4N	-MEMAMVSAESS-GCNSHMPYGYAAQARARER

FIG.2

**Potassium Channel (Kv 1.4)
S4-5 loop / N-terminal (full) interaction
Histidine Prototrophy**



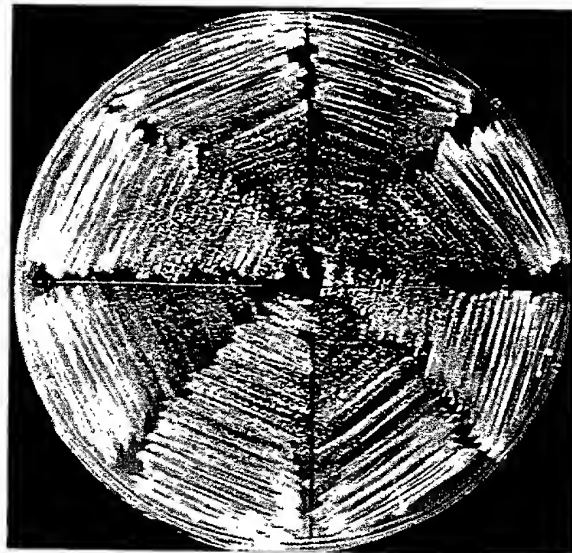
-HULT, 0 AND 15 mM AT
56 h 30 C



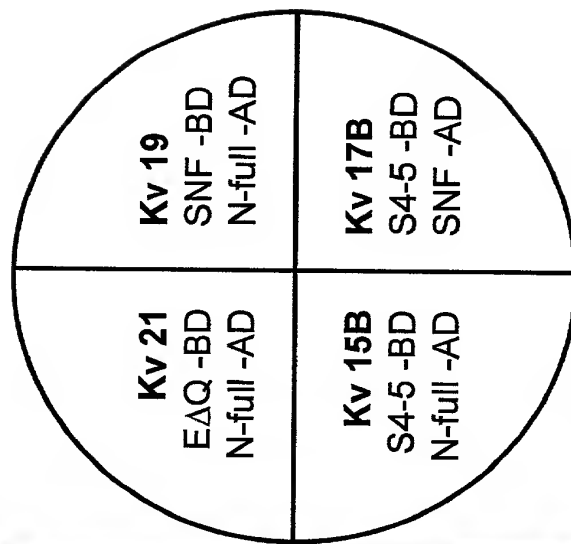
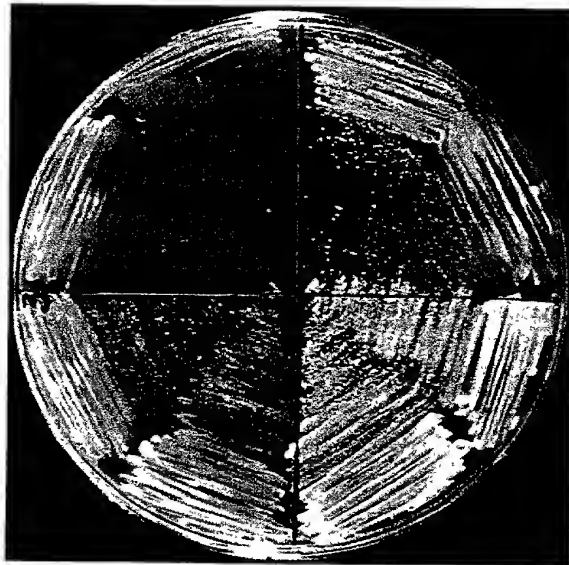
2-micron plasmids
CY770 host strain
all contain pCUP

FIG.3A

**Potassium Channel (Kv 1.4)
S4-5 loop / N-terminal (full) interaction
Histidine Prototrophy**



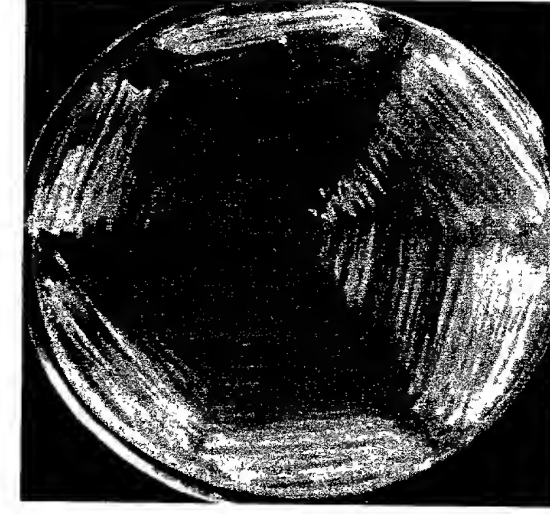
-HULT 56h 30 C



2-micron plasmids
CY770 host strain
all contain pCUP

FIG.3B

Potassium Channel (Kv 1.1/B1)
[S4-5 loop / B1 full length interaction]
Histidine Prototrophy



-HULT, 0 or 20 mM AT

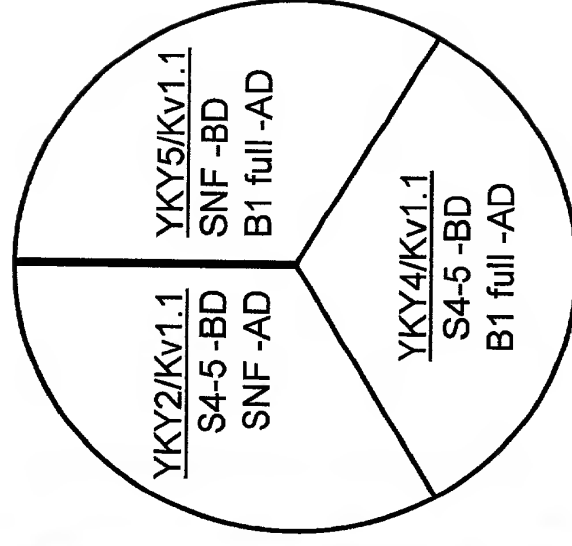
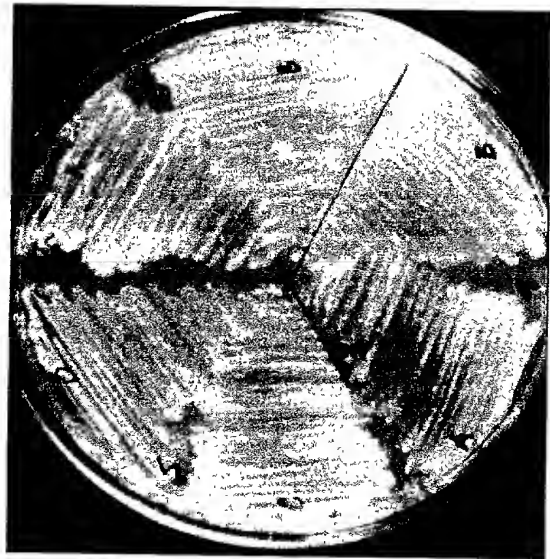


FIG.4A

Potassium Channel (Kv 1.1/B1)
[S4-5 loop / B1 full length interaction]
Cycloheximide Sensitivity



-ULT, 0 or 10 ug/ml CYH

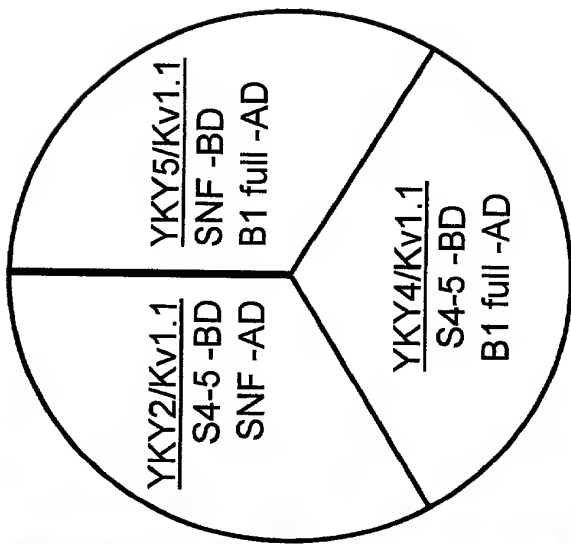
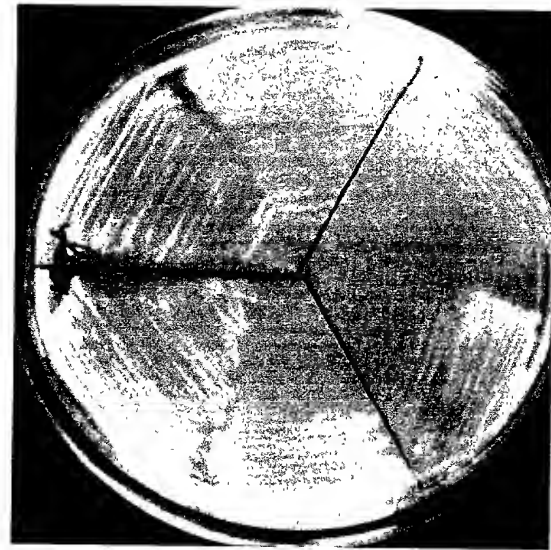
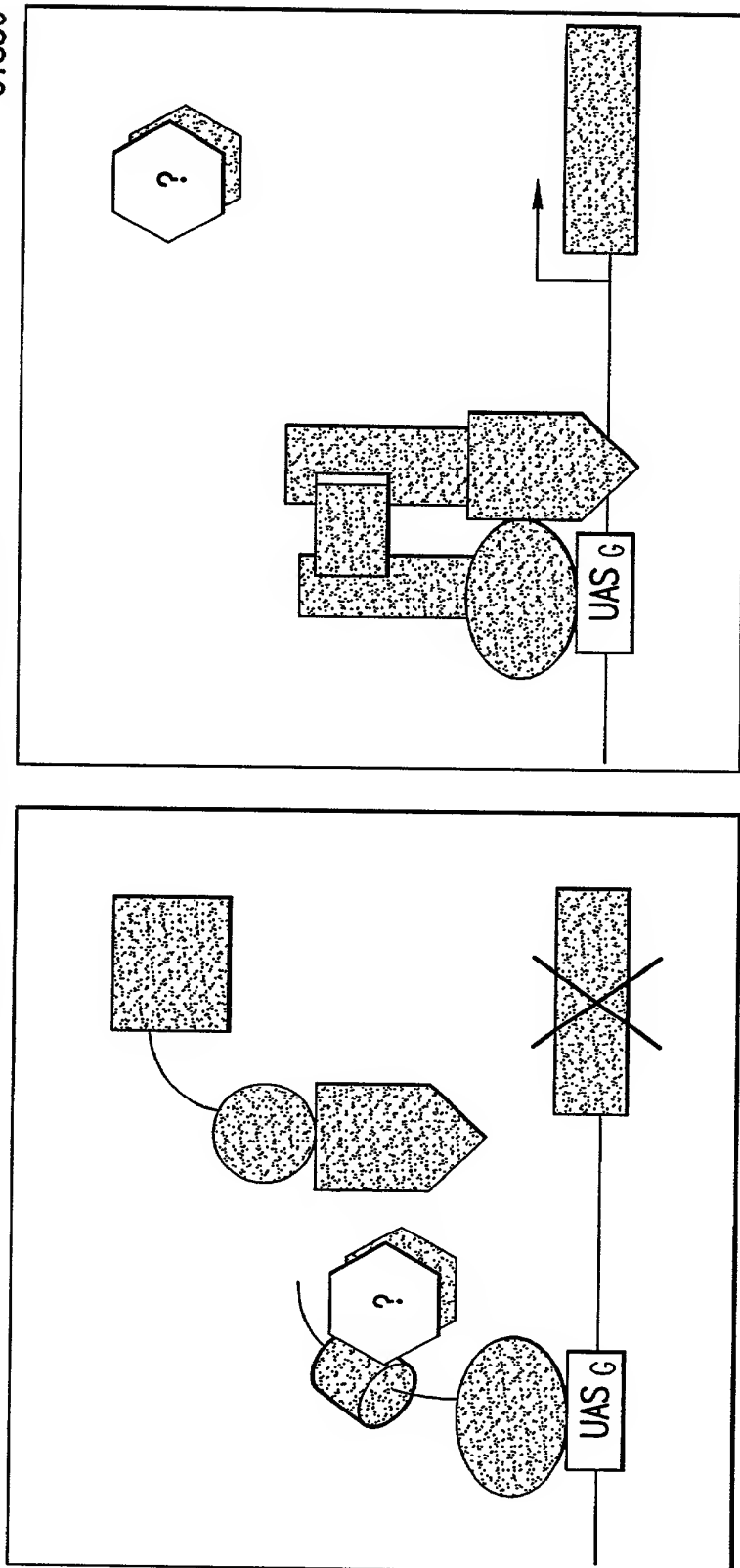


FIG.4B

RESCUE SCREEN / 2 PLATE ASSAY
(MEDIA CONTAINS CYCLOHEXIMIDE)

YKY4 / Kv1.1

CY856

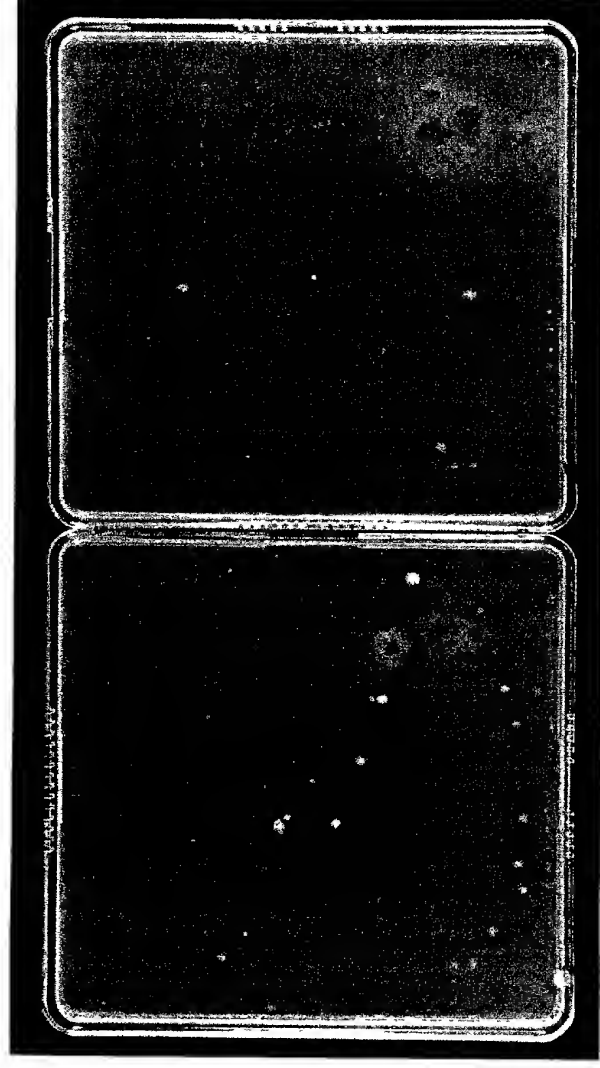


GROWTH

NO GROWTH

FIG.5

Potassium Channel Inverse-Selection screen
[Kv1.1 S4-5 loop / B1 full length interaction]



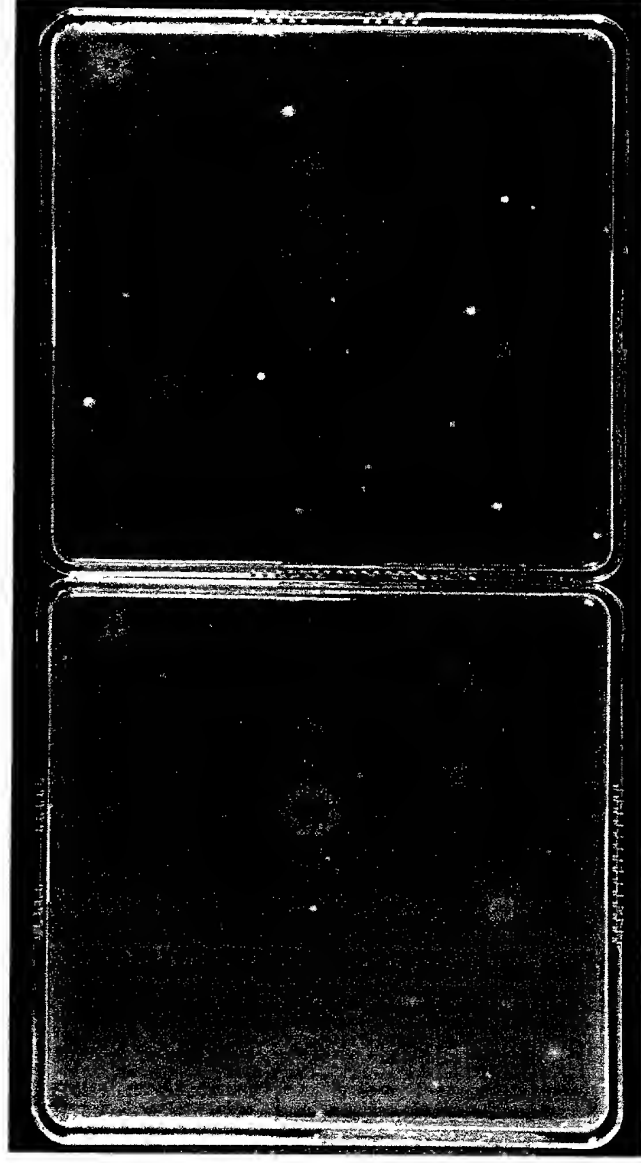
YKY4/KV1.1

CY856

Primary screen plate; 572 compounds per plate.

FIG. 6A

Potassium Channel Inverse-Selection screen
[Kv1.1 S4-5 loop / B1 full length interaction]



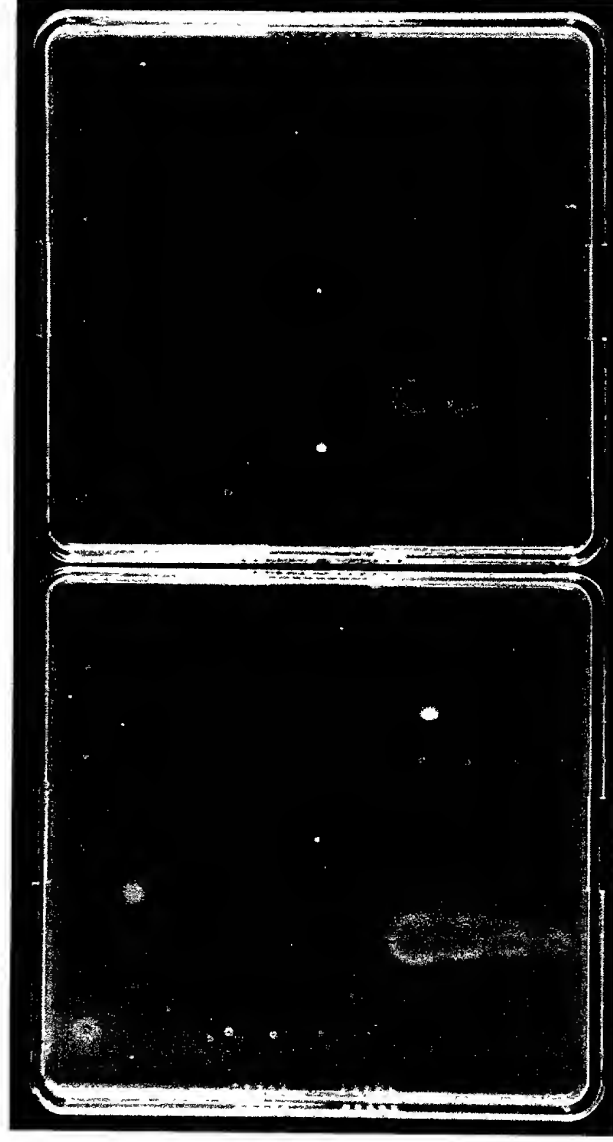
YKY4/Kv1.1

CY856

Secondary yeast screen plate; 55 compounds per plate.

FIG. 6B

Potassium Channel Inverse-Selection screen
[Kv1.1 S4-5 loop / B1 full length interaction]



YKY4/Kv1.1

CY856

Tertiary yeast screen plate; compound titration.

FIG. 6C

EFFECT OF WY-008340 ON hKv1.1/ β 1 IN OOCYTES

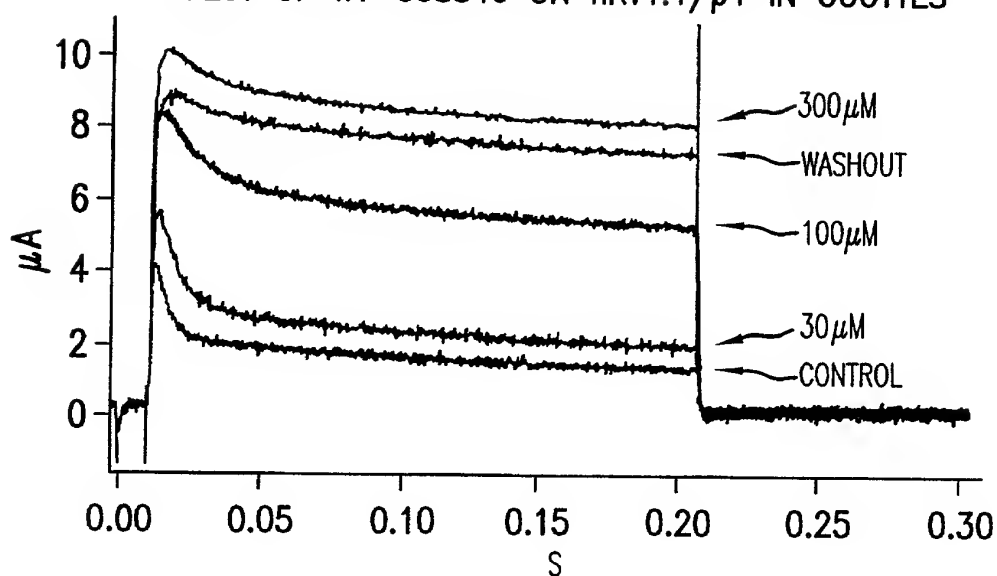


FIG. 7A

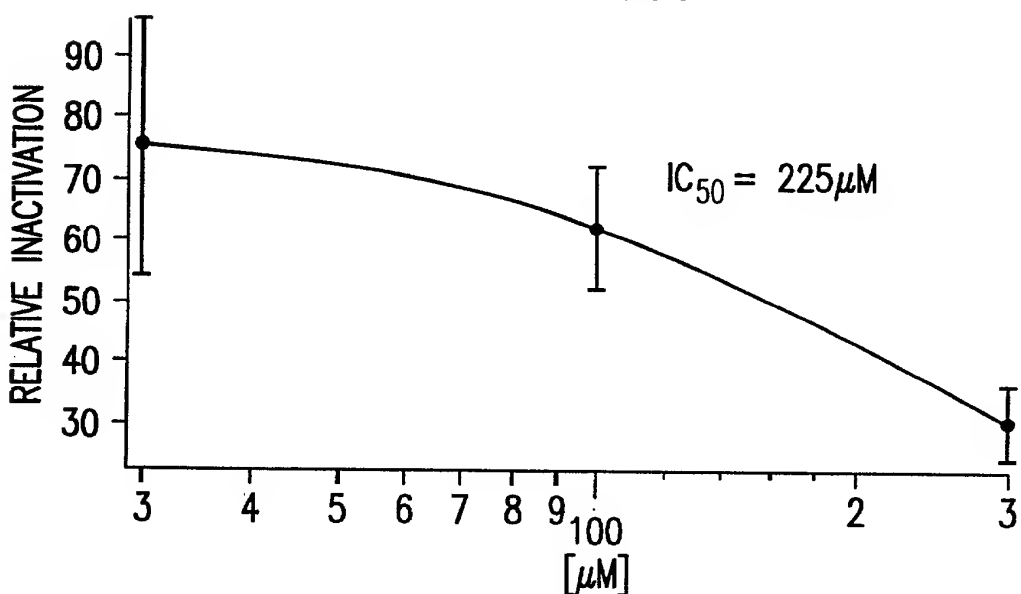


FIG. 7B

	REL. INACTIVATION		CURRENT AMPLITUDE	
	MEAN	SEM	MEAN	SEM
CONTROL	100.00	0.00	100.00	0.00
30 μ M	75.23	20.86	118.40	16.30
100 μ M	61.99	9.67	174.64	16.58
300 μ M	29.59	5.48	205.53	34.03
WASHOUT	24.90	6.73	188.27	31.18

n = 3,4

FIG. 7C

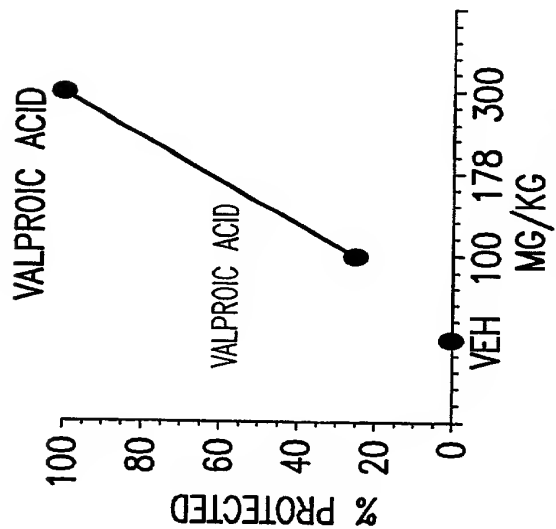


FIG. 8A

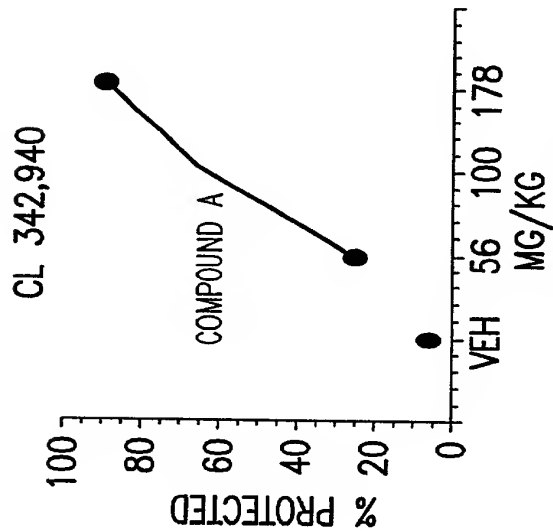


FIG. 8B

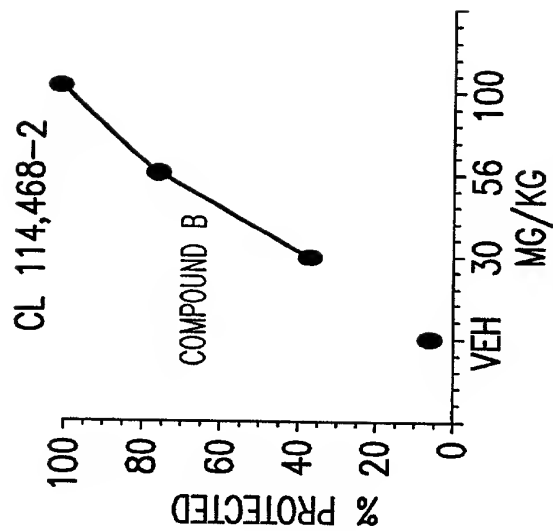


FIG. 8C